SPECIFICATION AMENDMENTS

Please amend paragraph **[0007]** as follows:

[0007] However, maintaining accurate enqueue counts and dequeue counts can be difficult in high-speed networks, such as optical carrier ("OC") networks. [[If]]In fact, in some high-speed networks, the writes to memory to update the dequeue count can lag behind the actual dequeue count by as many as 16 slots.

Please amend paragraph **[0023]** as follows:

[0023] In short, embodiments of the present invention provide techniques for determining whether a circular queue is empty or full (imminent overflow condition). In one embodiment, two checks are executed to determine whether the circular queue is empty and one check is executed to determine whether the circular queue is full. In one embodiment, the check for determining whether the circular queue is full is identical to one of the two checks for determining whether the circular queue is empty. In this embodiment, the two identical checks elude to the empty state or the full state of the circular queue based on the context in which the two identical checks are performed. In one context, the identical check is performed after enqueuing a queue element into the circular queue. In the other context, the identical check is performed after dequeuing a queue element from the circular queue. These and other embodiments are described in detail below.